ATTACHMENT 1

PROJECT DESCRIPTION
PG&E Line 406 and Line 407 Pipeline Project

1. PROJECT DESCRIPTION

Pacific Gas and Electric Company (PG&E) is planning to construct the Line 406 and Line 407 Pipeline Project (Project) in California's Central Valley in Yolo, Sutter, Sacramento, and Placer counties. This natural gas pipeline project involves a new 30-inch transmission pipeline that would be approximately 40 miles long (identified as Line 406 and Line 407), and a new Distribution Feeder Main (DFM).

According to PG&E, the existing transmission system in the Sacramento Valley region no longer has sufficient capacity to provide reliable natural gas service to existing customers or to extend service to planned development in the area. Without this project, customer reliability would be at risk and unplanned core customer outages could occur as early as 2009. This region is projected to continue experiencing a significant amount of ongoing residential and commercial development over the next 25 years, and would require a substantial amount of new local natural gas transmission pipeline capacity to meet the resulting customer load growth.

The Project would increase service reliability, add another major connection between the local transmission system and PG&E's backbone natural gas transmission system, and provide increased connectivity to re-route natural gas within the system. The vast majority of the natural gas that is delivered to customers in the Sacramento Valley region comes from Canada via PG&E's major north-south backbone system, Lines 400 and 401. Currently, most of this natural gas is delivered from lines 400 and 401 to the local transmission system at one connection point, the Buckeye Pressure Limiting Station. The Project would add a new major connection point to Lines 400 and 401, the Capay Metering Station, located approximately 15 miles south of the Buckeye Pressure Limiting Station. From this connection point, the Project would construct a large-diameter transmission pipeline across the valley, essentially bisecting the existing circle and delivering natural gas directly to an area of anticipated growth. Because the Project would also connect to Line 172 and Line 123, it would further reinforce the reliability of the region's natural gas system by providing a second large-diameter connection point between Lines 400 and 401 and existing pipelines serving several larger metropolitan areas in the Sacramento region.

1.1 Project Location

PG&E's proposed project area spans four counties from the foot of the Coast Range to the city of Roseville. The project area ranges in elevation from approximately 15 to 255 feet, and consists of flat to rolling hill topography. The natural vegetation and hydrology of much of the project area has been significantly modified for agricultural use. West of the Sacramento River, in the Line 406 and Line 407 project areas, agriculture dominates land use, with orchards, row crops, and irrigated pasture covering a majority of the land.

Line 406 would begin at PG&E's existing Lines 400 and 401 in Yolo County at the foot of the Coast Range and extend east to PG&E's existing Line 172A near the town of Yolo.

In the western portion of the project, in Yolo County, where Line 406 would be constructed, small intermittent creeks and irrigation ditches and canals make up a majority of the water features. The Dunnigan Hills area, located in the Line 406 segment, is largely open rangeland.

Line 407 would extend from PG&E's existing Line 172A near the town of Yolo and extend east to PG&E's existing Line 123 near the city of Roseville.

Line 407 would cross numerous irrigation canals and ditches and the Sacramento River. In the easternmost project area, Line 407 would cross two small intermittent creeks, Curry Creek, and the Natomas East Main Drainage Canal (Steelhead Creek). Line 407 would also cross numerous irrigation canals and ditches that irrigate rice production within the Natomas Basin. New residential and commercial developments are planned in the eastern portion of the Line 407 project area, within Placer, Sutter, and Sacramento counties. This area is currently made up of a mix of rice fields and nonnative annual grasslands with inclusive seasonal and vernal pool wetlands.

The new DFM would extend from the new Line 207 south paralleling Powerline Road to the Sacramento Metro Air Park development in Sacramento County.

1.2 Project Objectives

PG&E has identified the following objectives for the Line 406 and Line 407 Pipeline Project:

• Provide greater capacity and service reliability to the existing natural gas transmission and distribution pipeline system while minimizing costs to PG&E's customers .

• Extend natural gas service to planned residential and commercial developments in Placer, Sutter, and Sacramento counties.

• Install project facilities in a safe, efficient, environmentally sensitive, and cost-effective manner.

• Locate the pipeline to minimize the potential of environmental impacts resulting from damage by outside sources.

1.3 Pipeline Routes and Components

Detailed descriptions of the four segments of the Line 406 and Line 407 Pipeline Project are outlined below (see Figure 1). These descriptions are provided sequentially from west to east, although this is not the order in which they would be constructed.

Line 406 would be constructed in 2009. Line 407 (separated into Line 407 East and Line 407 West), and the Powerline Road DFM segments would be constructed as dictated by the added load on the transmission system. Current projections are that Line 407 East and the Powerline Road DFM would be required in 2010. However, the pipelines may be installed prior to road improvements associated with developments along Baseline and Riego Roads. Line 407 West is projected to be required in 2012 but may be required earlier depending upon load growth in the area.

1.3.1 Line 406

Line 406 would consist of approximately 14 miles of 30-inch-diameter natural gas transmission pipeline operating at a maximum allowable operating pressure of 975 pounds per square inch gauge (psig), and transporting up to 475,000,000 cubic feet of natural gas per day between existing Lines 400 and 401 and existing Line 172A in Yolo County. From Lines 400 and 401, the Line 406 pipeline would extend east across agricultural fields to County Road (CR) 87, where it would turn south to a point just north of the intersection with CR 19. The route would proceed east under CR 87 and cross addititional agricultural fields to Interstate 505 (I-505) to align with CR 17. After crossing under I-505, the route would parallel CR 17. From this point, Line 406 would continue east, paralleling CR 17 to a point at the east end of the Dunnigan Hills, where it would turn north for approximately 2,500 feet. At this point, the route would turn east along farm roads to, and under, Interstate 5 (I-5). On the east side of I-5, Line 406 would continue east to a tie-in point with Line 172A and Line 407 West. The proposed in-service date is October 1, 2009.

1.3.2 Line 407 West

Line 407 West would consist of approximately 13.5 miles of 30-inch-diameter natural gas transmission pipeline operating at 975 psig and transporting up to 180,000,000 cubic feet of natural gas per day between Line 172A and the tie-in with Line 407 East near the intersection of Powerline and Riego roads in Sutter County. Beginning at the tie-in point with Lines 406 and 172A near I-5, Line 407 West would extend east through agricultural fields to CR 98. The route would cross under and parallel CR 98 south to CR 16A. The pipeline would then head east along CR 16A to CR 99B, which it would parallel south to CR 17. At CR 17, the pipeline would turn east and parallel CR 17 to the Knights Landing Ridge Cut. The route would cross under this canal to the east and pass through more agricultural fields before reaching the western levee of the Yolo Bypass. Line 407 West would then cross east through agricultural fields within the Yolo Bypass to an irrigation canal on the eastern side of the Bypass, which it would parallel north to CR 16. The route would parallel CR 16 east through Sacramento River Ranch Conservation Bank lands and walnut orchards to the Sacramento River crossing site near the junction of CR 16 and CR 117. From this point, the pipeline would cross under the Sacramento River for approximately 3,000 feet and would then follow Riego Road in Sutter County past the Huffman East, Huffman West, Vestal, and Atkinson Natomas Basin Habitat Conservation tracts, to the corner of Powerline and Riego roads where it would meet the proposed Powerline Road DFM and Line 407 East.

INSERT FIGURE 1

1.3.3 Line 407 East

Line 407 East would consist of approximately 12 miles of 30-inch-diameter pipeline operating at 975 psig and transporting up to 180,000,000 cubic feet of natural gas per day between Line 407 West in Sutter County and Line 123 in Placer County. Line 407 East would extend east from the junction of Line 407 West and the Powerline Road DFM along Riego and Baseline roads in Sutter and Placer counties. The route would cross State Route (SR) 70/99, and a number of irrigation canals, including the North Drainage Canal and the Natomas East Main Drainage Canal (Steelhead Creek). Line 407 East would parallel the northern border of the Placer Vineyards Specific Plan area before connecting with Line 123 at the intersection of Baseline and Fiddyment roads.

1.3.4 Powerline Road Distribution Feeder Main (DFM)

The Powerline Road DFM would consist of approximately 2.5 miles of 10-inch-diameter steel pipeline operating at 975 psig and transporting up to 17,000,000 cubic feet of natural gas per day to new developments in north Sacramento County, including the Metro Air Park and North Natomas. This segment would parallel Powerline Road between Riego Road in Sutter County where Lines 407 East and West meet, and West Elverta Road in Sacramento County.

1.3.5 Additional Project Components

The project would include the construction of additional appurtenances necessary for operation of the four line segments. Five fenced, aboveground pressure limiting, pressure regulating, metering, and main line valve stations would be constructed along Line 406 and Line 407 to ensure that proper pressures are maintained in the transmission system and to reduce the pressure of the natural gas before delivering it to the distribution pipeline system. These stations would consist of the following:

• The Capay Metering Station would be constructed at the connection of Lines 400 and 401 and Line 406, and would cover an area of approximately 100 feet by 100 feet.

• The Yolo Junction Pressure Limiting Station would be constructed at the connection of Line 406 and Line 172A near I-5, and would cover an area of approximately 100 feet by 100 feet.

• The Baseline Road Pressure Limiting Station would be constructed at the connection of Line 407 and Line 123 at Baseline Road and Watt Avenue and would be approximately 35 feet by 75 feet in area.

• The Powerline Road Pressure Regulating Station, near the corner of Powerline Road and West Elverta Road along the Powerline Road DFM, would be constructed in an area measuring approximately 35 feet by 75 feet.

• The Powerline Road Main Line Valve would be installed within an area measuring approximately 30 feet by 30 feet at the intersection of Riego and Powerline roads.

Other components necessary to the operation of the pipeline include aboveground line markers and electrolysis test stations.

1.4 Permits and Permitting Agencies

In addition to action by the CSLC, as the CEQA lead agency, the proposed Project may require permits and approvals from reviewing authorities and regulatory agencies that may have oversight over aspects of the proposed project, including but not limited to:

- US Army Corps of Engineers (Corps);
- U.S. Fish and Wildlife Service (USFWS);
- Central Valley Regional Water Quality Control Board (CVRWQCB);
- California Department of Fish and Game (CDFG);
- California Department of Transportation;
- State Reclamation Board;
- Sacramento Metropolitan Air Quality Management District, Yolo Solano Air Quality Management District, Feather River Air Quality Management District and Placer County Air Pollution Control District;
- Placer, Sacramento, Sutter, Yolo Counties;
- Appropriate Reclamation Districts
- Sacramento River Ranch LLC; and
- The Natomas Basin Conservancy.

2. ALTERNATIVES

In accordance with Section 15126.6 of the CEQA Guidelines (California Governor's Office of Planning and Research 2001), an EIR must "describe a range of reasonable alternatives to the Project, or to the location of the Project, which would feasibly attain most the basic objectives of the Project, but would avoid or substantially lessen any of the significant effects of the Project, and evaluate the comparative merits of the alternatives." The State CEQA Guidelines also require that a No Project Alternative be evaluated, and that under specific circumstances, an environmentally superior alternative be designated from among the remaining alternatives.

2.1 ALTERNATIVES PROPOSED FOR CONSIDERATION

Alternatives currently proposed by PG&E are described briefly below. Additional alternatives may be included dependent on information received during the public scoping and as a result of the environmental analysis.

2.1.1 Line 406 Central Alternative and Variations

Two variations of the Line 406 central alternative are proposed: Line 406 Central Alternative A and Line 406 Central Alternative B. The western portions of variations A

and B would each follow the same route, by starting at Lines 400 and 401 and following CR 16 to I-505 and then heading north through a grape vineyard to align with CR 15B on the west side of the highway. The route would continue east on CR 15B through the Dunnigan Hills area, then cross Smith Creek until it becomes CR 93. From this juncture, variations A and B (15.5 and 15 miles long, respectively) would follow two different routes.

Variation A would travel northeast along an ephemeral stream to CR 14A, then proceed east on CR 14 across Interstate I-5 to Line 172A. Variation A would then parallel Line 172A south to the tie-in point with Line 172A and Line 407, north of the town of Yolo.

Variation B would continue east from the intersection of CR 15B and CR 93, cross country to Line 172A just south of the town of Dufour. Variation B would then parallel Line 172A south to the tie-in point with Line 172A and Line 407, north of the town of Yolo.

2.1.2 Line 407 Central Alternative (Variation A)

The Line 407 Central Alternative would run east from Line 172A and the terminus of Line 406 through agricultural fields to CR 98. The route would cross under and parallel CR 98 south to CR 16A. The Line 407 Central Alternative would then parallel CR 16A east to CR 99B, which it would parallel south to CR 17. At CR 17, the pipeline would turn east and parallel CR 17 to the Knights Landing Ridge Cut. The route would cross under this canal and cross agricultural fields before reaching the western levee of the Yolo Bypass. Variation A would then head southeast through agricultural fields within the Yolo Bypass to a point on the Sacramento River directly across from West Elverta Road to Powerline Road. The route would head north paralleling Powerline Road to Riego Road and would then parallel Riego Road through the Natomas Basin Conservancy to Steelhead Creek. The route would parallel the northern border of the Placer Vineyards Specific Plan area along Baseline Road (Riego Road becomes Baseline Road in Placer County) until the tie-in with Line 123 at the intersection of Baseline and Fiddyment Roads.

2.1.5 Line 407 Southern Alternative

The Line 407 Southern Alternative would begin at existing Line 172A and the terminus of Line 406. The line would parallel existing Line 172A south to near CR 99 just north of the city of Woodland, and would extend east across row crops to SR 113, where it would parallel CR 18C before reaching CR 102. At CR 102, the route would turn northeast and extend to CR 18B, where it would continue east through agricultural land consisting of mixed row crops and rice fields. The route would cross Cache Creek, three extensions of Knights Landing Ridge Cut, the Tule Canal, and one other smaller canal before reaching walnut orchards near the western side of the Sacramento River crossing.

The route would then parallel West Elverta Road east of the Sacramento River through rice fields, passing the northern edges of the Sacramento International Airport and the new Metro Air Park development area. Proceeding eastward, the route would cross numerous irrigation canals and ditches, as well as the Natomas East Main Drainage

Canal (Steelhead Creek). At the town of Elverta, the route would parallel an existing energy utility corridor northeast through agricultural land and the Placer Vineyards Specific Plan development area toward Baseline Road. Four crossings of small tributaries to Steelhead Creek would be required before the route would reach Baseline Road, which it would parallel east to the tie-in with Line 123.

2.1.6 Systems Alternatives

An additional alternative to the proposed Project would be to install parallel pipelines along existing rights-of-way. PG&E would have to install a total of 63 miles of parallel transmission pipeline to provide sufficient incremental capacity to serve the same amount of customer load growth that the proposed Project could accommodate.

2.1.7 No Project Alternative

Under the No Project Alternative, a natural gas pipeline would not be constructed between existing Lines 400 and 401 in Yolo County and the existing Line 123 in Placer County. PG&E's studies indicate that the natural gas transmission and distribution system may not be able to reliably serve customers and planned development in Yolo, Sacramento, Sutter, and Placer counties by 2009. Additionally, continued growth in the area would put further strain on existing natural gas infrastructure, and could result in emergency restrictions or interruption of services.

INSERT FIGURE 2

3. SCOPE OF EIR

Pursuant to State CEQA Guidelines section 15060, the CSLC staff conducted a preliminary review of the proposed Project. Based on the potential for significant impacts resulting from the proposed Project, an EIR was deemed necessary. A preliminary listing of issues to be discussed in the EIR is provided below. Additional issues may be identified at the public scoping meeting and in written comments.

Four designations are used when examining the potential for impacts according to CEQA issue areas. These designations are:

Potentially Significant Impact (Class I): Any impact that could be significant, and for which no mitigation has been identified or implemented. If any potentially significant impacts are identified and cannot be mitigated, a Statement of Overriding Considerations is required should the proposed Project be approved.

Less-Than-Significant Impact with Mitigation Incorporated (Class II): Any impact that could be significant, but which requires mitigation to reduce the impact to a less-than-significant level. Impacts in this category are otherwise considered potentially significant impacts, but ones for which mitigation measures have been designed and would be enforced in order to reduce said impacts to below applicable significance thresholds.

Less-Than-Significant Impact (Class III): Any impact would not be considered significant under the CEQA relative to existing standards.

Beneficial Impact (Class IV): The Project would provide an improvement to an issue area in comparison to the baseline information.

The estimations of impact levels used for this Notice of Preparation are based solely on preliminary documents and do not preclude findings of significance that would be made during the preparation of the EIR, including findings that could change the significance of an impact and how it would need to be addressed within the EIR. The following provides potential environmental impacts from the proposed Project using preliminary significance criteria that may be modified for the EIR.

3.1 Potential Environmental Effects

3.1.1 Aesthetics

An adverse impact on aesthetic/visual resources is considered significant and would require mitigation if the proposed Project would:

- Cause inconsistency with adopted visual resource management (VRM) plans or local ordinances. In those areas where no VRM plans exist, impacts would be determined by examining the study area for sensitive viewsheds, areas of high user volumes, and areas of unique visual resources. Sensitive resources would then be examined on a case-by-case basis to determine the level of impact.

Significant visual impacts would be those that dominate the viewshed from sensitive locations and change the character of the landscape both in terms of physical characteristics and land uses;

- Result in a substantial adverse effect on a scenic area or vista;
- Substantially damage scenic resources, including, but not limited to, trees, rock outcroppings, and historic buildings within a State scenic area or highway;
- Substantially degrade the existing visual character or quality of the site and its surroundings; or
- Create a new source of substantial light or glare that would adversely affect day or nighttime views in the area.

Project-related activities may temporarily impact the surrounding visual character of the Project area, and ground disturbance would occur within areas that are regularly tilled for agricultural production. However, the topography would be restored following Project completion. Signs marking the pipeline alignment would remain permanent surface features, but would not dominate scenic views within the area. These structures are designed to be seen by the public, but are relatively small in size.

Some construction activities may take place at night and may require the use of high-energy lighting, which can be highly visible at a long distance given nighttime conditions. These practices would be temporary impacts during the construction phase and would not constitute the creation of permanent new sources of visual glare or substantial light.

3.1.2 Agricultural Resources

An adverse impact on agricultural resources is considered significant and would require mitigation if Project construction or operation would:

- Convert prime agricultural land, unique farmland, or farmland of statewide importance to non-agricultural use;
- Conflict with existing land use plans, policies, or regulations for agricultural use or a Williamson Act contract;
- Involve other changes in the existing environment that, due to their location or nature, could result in permanent loss of farmland or conversion of farmland to non-agricultural use; or
- Cause substantial soil erosion or loss of topsoil.

Portions of the project would cross agricultural land that may be under Williamson Act contract. Construction and operation of the proposed Project would be incidental to agricultural production. Restrictions in the permanent easement of the project area would prohibit the planting of trees or vines within a 30-foot-wide strip above the pipeline for protection of the pipe, but other uses would be allowed. The project would result in the loss of a small amount of orchards, where the transmission pipeline would

be located through an existing orchard. Agricultural production could resume following Project construction.

3.1.3 Air Quality

An Air Quality impact is considered significant if it:

- Conflicts with or obstructs implementation of the applicable air quality plan;
- Violates any air quality standard or contribute substantially to an existing or projected air quality violation;
- Results in a cumulatively considerable net increase of any criteria pollutant for which the project region is in nonattainment under an applicable federal or state ambient air quality standard (including releasing emissions which exceed quantitative thresholds for ozone precursors);
- Exposes sensitive receptors to substantial pollutant concentrations; or
- Creates objectionable odors affecting a substantial number of people.

Activities associated with construction of the Project would generate emissions of criteria pollutants from the operation of diesel engines and construction equipment. Criteria air pollutants include ozone, carbon monoxide (CO), nitrogen dioxide (NO_2), sulfur dioxide (SO_2), particulate matter (PM_{10} and $PM_{2.5}$), and lead. Earth-moving activities proposed by the Project have the potential for significant particulate matter emissions in the form of fugitive dust. The operation of construction equipment would also generate greenhouse gas emissions that are known to contribute to global warming effects. PG&E proposes to include the implementation of Best Management Practices (BMPs) designed to reduce emissions throughout the construction phase.

The primary source of the long term operational impacts of the proposed Project would be from maintenance of the new transmission lines. The maintenance of the improvements would occur on a regular basis to minimize the risk of equipment leaks. PG&E estimates that the maintenance would average daily truck trips totaling 20 miles per day. The transfer of natural gas through the pipeline would not require significant burning of fuel, use of engines, or any other processes that would be likely to produce criteria pollutants. However, the potential risk of accidental release of fuel and or release of natural gas during initial and/or continual operation of Line 406 and 407 exists.

3.1.4 Biological Resources

An adverse impact on biological resources is considered significant and would require mitigation as specified below.

General
A Biological Resource impact is considered significant if:

- There is a potential for any part of the population of a special status species (such as State or Federally Endangered species) to be directly affected or indirectly harmed through the disturbance or loss of its habitat;

- A net loss occurs in the functional habitat value of a sensitive biological habitat, or any Area of Special Biological Significance;

- There is a potential for the movement or migration of fish or wildlife to be impeded; or

- A substantial loss occurs in the population or habitat of any native fish, wildlife, or vegetation or if there is an overall loss of biological diversity, with substantial defined as any change that could be detected over natural variability.

Wetlands
An adverse impact on wetlands is considered significant and would require mitigation if Project construction or operation activities would:

- Fill or alter a wetland or vernal pool, resulting in a long-term change in its hydrology or soils, or the composition of vegetation of a unique, rare, or special concern wetland community;

- Remove or significantly prune overstory tree species in a manner that would affect wetland functions related to bank stabilization, stream temperature, or habitat; or

- Cause short- or long-term violations of Federal or State water quality standards for streams that lead to wetlands, measured as in-stream elevated turbidity readings or decreased dissolved oxygen (DO) levels.

Vegetation
An adverse impact on vegetation is considered significant and would require mitigation if Project construction or operation activities would:

- Disturb a substantial portion of the vegetation type within a local region to the point where natural or enhanced regeneration could not restore vegetation to its pre-construction condition within 3 to 5 years;
- Result in the long-term (more than 5 years) reduction or alteration of unique, rare, or special concern vegetation types, riparian vegetation, or natural communities;

- Introduce new, or lead to the expanded range of existing, invasive noxious weed species or soil pests, so that they interfere with crop production or successful revegetation of natural communities;
- Create substantial barriers for dispersal of native plant species; or
- Result in a spill or leak that would contaminate the soil to the extent of eradicating the existing vegetation, inhibiting revegetation, or migrating to other areas and affecting soil and water ecology via erosion and sedimentation.

Wildlife and Aquatic Resources

An adverse impact on wildlife and aquatic resources is considered significant and would require additional mitigation if Project construction or operation would:

- Change the diversity or substantially alter the numbers of a local population of any wildlife or aquatic species, or interfere with the survival, growth, or reproduction of affected wildlife and fish populations;
- Substantially interfere with the movement or range of migratory birds and other wildlife, or the movement, range, or spawning of any resident or anadromous fish;
- Result in a substantial long-term loss of existing wildlife or aquatic habitat;
- Cause substantial deterioration of existing fish habitat;
- Introduce new, invasive wildlife or aquatic species to an area; or
- Create a potential health hazard or involve the use, production, or disposal of materials in a manner that would be expected to pose a hazard to wildlife or fish populations in the project area.

Threatened, Endangered, and Special-Status Species

An adverse impact on federally or State-listed species or species proposed for listing is considered significant and would require mitigation if Project construction or operation activities would:

- Reduce the abundance of sensitive species, including species under the protection of the Migratory Bird Treaty Act, that occur within the Project area;
- Result in the loss or alteration of existing or proposed critical habitat for one or more listed species;
- Cause a temporary loss or alteration of habitat important for one or more listed species that could result in avoidance by a listed species, or that could cause increased mortality or lowered reproductive success of the species;
- Result in direct or indirect impacts on candidate or sensitive species populations, or their habitat, that would contribute to or result in the Federal or State listing of the species (e.g., substantially reducing species numbers or resulting in the permanent loss of habitat essential for the continued existence of a species); or
- Create a potential health hazard or involve the use, production, or disposal of materials that pose a hazard to a special-status species population in the Project area.

The proposed Project site supports habitat for several special status plants, and animals. These species, as well as their habitats, could potentially be disturbed or harmed during construction activities. Removal of vegetation and direct or indirect impacts to wetlands has the potential to impact wildlife habitat. PG&E has proposed a variety of measures for this area, including providing Worker Environmental Awareness Program (WEAP) training, using Horizontal Directional Drilling (HDD) at key crossings of sensitive lands, preparing an HDD Fluid Release Contingency Plan, retaining a USFWS-approved biologist to monitor known occurrences of special status species, conducting nesting bird surveys for avian species and avoiding sensitive areas wherever feasible.

3.1.5 Cultural Resources

A Cultural Resources impact is considered significant if it:

- Results in damage to, the disruption of, or otherwise adversely affects a property that is listed in the California Register of Historic Resources (CRHR) or a local register of historical resources as per section 5020.1 of the Public Resources Code;

- Results in damage to, the disruption of, or otherwise adversely affects an important archaeological resource (prehistoric or historic) such that its integrity could be compromised or its eligibility for future listing in the CRHR diminished; or

- Results in damage to, the disruption of, or otherwise adversely affects an important historical resource such that its integrity could be compromised or its eligibility for future listing in the CRHR diminished.

Construction of buried pipelines and support facilities could impact contributing features of the Reclamation District 1000 (roads, levees, canals, etc.) and historic-period resources. Reclamation District 1000 is a member of the Sacramento Area Flood Control Agency (SAFCA), and is authorized to oversee agricultural and urban drainage, flood control, and levee maintenance within the Project area.

Where pipelines cross natural drainages, buried archaeological sites could be impacted. PG&E has proposed measures for this area, including completing surveys of unexamined areas before construction begins. If resources are identified, the areas should be avoided or evaluated in consultation with the State Historic Preservation Officer (SHPO) and the California State Lands Commission (CSLC).

3.1.6 Geology, Soils, Mineral Resources and Paleontologic Resources

Geology and Soils

An adverse impact on geology and soils is considered significant and would require mitigation if:

- Settlement of the soil could substantially damage structural components;
- Ground motion due to a seismic event or any resulting phenomenon such as liquefaction or settlement could substantially damage structural components;
- Rupture of a known earthquake fault as delineated on the most recent Alquist-Priolo Earthquake Fault Zoning Map could expose people or structures to potential adverse effects;
- Damage resulting from any of the above conditions could result in an inadvertent or uncontrolled release of hazardous, harmful or damaging substances into the environment;
- Deterioration of structural components due to corrosion, weathering, fatigue or erosion could reduce structural stability;
- Result in substantial soil erosion or the loss of topsoil;
- Erosion rates would be increased, or soil productivity would be reduced by compaction or soil mixing, to a level that would prevent successful rehabilitation and eventual reestablishment of vegetative cover to the recommended or pre-construction composition and density;
- Agricultural productivity would be reduced for longer than 3 years because of soil mixing, structural damage, or compaction; or
- Any Project activity or condition has a chance of adversely affecting the stability or proper functioning of any levee or levee system.

Hazards related to slope instability and landslides are generally associated with foothill areas and mountain terrain as well as steep river banks and levees. Excavation and trenching for the pipeline would occur across relatively flat or gently sloping agricultural lands. Though there is a risk of landslide at certain points along the proposed pipeline route, foundation demolition could be executed without danger of triggering a landslide on the river bank with implementation of proper mitigation measures. PG&E plans to use HDD at levee crossings.

Saturated, loose sands and soft clays may pose difficulties in access during construction. Soft or loose soils could also cause instability of trenches and other excavations during construction of the facilities. However, design-level geotechnical studies would be performed to evaluate the potential for, and effects of, saturated, soft, or loose soils where necessary.

Soil surveys indicate the majority of the soils in the project area are moderately to highly corrosive to steel. These corrosive subsurface soils would have a detrimental effect on concrete and metals exposed to these soils. Depending on the degree of corrosivity of the subsurface soils concrete, reinforcing steel in concrete structures, and bare-metal, piping exposed to these soils could deteriorate, which could eventually lead to structural or pipeline failures. Design-level geotechnical studies would be conducted to identify the presence of potentially detrimental substances, such as chlorides and sulfates, in soils. Appropriate design measures for protection of reinforcements, concrete, and metal-structural components against corrosion would be utilized, such as use of

corrosion-resistant materials and coatings, and use of passive and/or active cathodic protection systems.

Mineral Resources

An adverse impact on mineral resources is considered significant and would require mitigation if it would:

- Result in the loss of availability of a known mineral resource that would be of value to the region and the residents of the State.
- Result in the loss of availability of a locally-important mineral resource recovery site delineated on a local general plan, specific plan or other land use plan.

The primary mineral resources in the project area are non-metallic mineral commodities, consisting of sand, gravel, and crushed rock. The project should not result in the loss of availability of any known mineral resources.

Paleontological Resources

Paleontological resources are fossilized evidence of past life found in the geologic record. Despite the prodigious volume of sedimentary rock deposits preserved worldwide and the enormous number of organisms that have lived through time, preservation of plant or animal remains as fossils is an extremely rare occurrence. Because of the infrequency of fossil preservation, fossils (particularly vertebrate fossils) are considered to be nonrenewable resources. Because of their rarity and the scientific information they can provide, fossils are highly significant records of ancient life. As such, paleontological resources may be considered "historically significant" in the scientific annals of California under CEQA Guidelines Section 15064.5[3]. An impact to an identified paleontologic resource is considered "historically significant" and would require mitigation if:

- Project construction or operation would result in damage or loss of vertebrate or invertebrate fossils that are considered important by paleontologists and land management agency staff; or
- The resource is considered to have scientific or educational value. A paleontological resource can be considered to have scientific or educational value if it:
    - provides important information on the evolutionary trends among organisms, relating living inhabitants of the earth to extinct organisms;
    - provides important information regarding development of biological communities or the interaction between botanical and zoological biota;
    - demonstrates unusual or spectacular circumstances in the history of life;
    - is in short supply and in danger of being depleted or destroyed by the elements, vandalism, or commercial exploitation and is not found in other geographic locations;
    - is recognized as a natural aspect of our national heritage;

- lived prior to the Holocene (~11,000 B.P.); and
- is not associated with an archaeological resource, as defined in Section 3(1) of the Archaeological Resources Protection Act of 1979 (16 USC § 470bb[1]).

Construction of buried pipelines and support facilities, as well as the crossing of natural drainages, could impact unknown paleontological resources.

3.1.7 Hazards and Hazardous Materials

An adverse impact regarding hazards and hazardous materials is considered significant and would require mitigation if the Project would:

- Expose people to an unacceptable risk of existing or potential hazards, including upset and accident conditions involving the release of hazardous materials into the environment;
- Create significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials;
- Create hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste that could adversely affect existing or proposed schools, residential areas, or other sensitive receptors;
- Impair implementation of, or physically interfere with, an adopted emergency response plan or emergency evacuation plan; or expose people or structures to a significant risk of loss, injury, or death involving wildland fires, including where wildlands are adjacent to urbanized areas or where residences are intermixed with wildlands; or
- Significantly increase fire hazard in areas with flammable materials.

There also exists potentially significant Hazards and Hazardous Materials impact if:

- Current or future operations may not be consistent with federal, state or local regulations (note: conformance with regulations does not necessarily mean that no significant hazard related impacts exist);
- Any facility or operation, existing or proposed, does not conform to its contingency plans or other hazard or risk related plans that are in effect;
- Existing and proposed emergency response capabilities are not adequate to effectively mitigate emergency conditions the project has the potential for causing; or
- There is a potential for fires, explosions, releases of flammable or toxic materials, or any other accidents that could cause injury or death to members of the public.

Construction and operation of Lines 406 and 407 would occur in rural areas, but also within close proximity to residences and other sensitive receptors, and therefore, could pose a risk to public safety. Project-related hazards potentially include accidental

releases of fuel and/or release of natural gas during the initial and/or continual operation of Line 406 and 407. Soil or items contaminated with hazardous materials in sufficient amounts to present a health risk could inadvertently be encountered during construction, and workers and the public could be exposed to adverse health risks. A Spill Prevention, Control and Countermeasure Plan (SPCCP) would be prepared for the proposed Project as required by the Storm Water Pollution Prevention Plan (SWPPP) and would include action measures to minimize the potential for accidental releases of hazardous materials into the environment. In addition, the Line 406 and 407 pipelines would be designed and constructed pursuant to current safety standards. Lastly, PG&E would follow all applicable hazards and hazardous materials regulations for the use, transportation, or disposal of hazardous materials.

3.1.8 Hydrology and Water Quality

General

An adverse impact on water quality is considered significant and would require mitigation if Project construction or operation would:

- Cause the water quality objectives promulgated by the Regional Water Quality Control Board with jurisdiction over the region affected by the Project to be exceeded;

- Cause the water quality criteria contained in the Proposed California Toxics Rule to be exceeded;

- Result in either short- or long-term violation of Federal, or State agency numerical water quality standards or water quality objectives; or

- Cause a change in background levels of chemical and physical constituents or elevate turbidity levels such that long-term changes in the receiving environment of the site, area or region occur, or such that beneficial uses of the receiving water are impaired or degraded.

Groundwater

An adverse impact on groundwater resources is considered significant and would require mitigation if Project construction or operation would:

- Alter the flow of groundwater to local springs or wetland areas; or
- Interrupt or degrade groundwater used for private or municipal purposes;

Surface Water

An adverse impact on surface water resources is considered significant and would require mitigation if Project construction or operation would:

- Result in increased sedimentation or erosion that adversely affects the operation of irrigation water control structures, gates, or valves or the quality of municipal water supply reservoirs;

- Result in increased sedimentation or erosion such that degradation of water quality results;
- Reduce stream flow quantity or quality where such a change would significantly damage either beneficial uses or aquatic life;
- Increase contaminant levels in the water column, sediment, or biota to levels shown to have the potential to cause harm to marine organisms even if the levels do not exceed formal objectives;
- Increase the potential for flooding outside the stream channel;
- Place permanent structures within the 100-year floodplain that would be damaged by flooding; or
- Degrade the integrity of structures, such as bridges, pipelines, and utilities due to erosion and improper conveyance of stormwater during construction and operation.

The Project site is within the jurisdiction of the California Central Valley Regional Water Quality Control Board (CVRWQCB), which has the authority to implement water quality protection standards through the issuance of permits for discharges to waters at locations within its jurisdiction. Water quality objectives for the Sacramento River are specified in the The Water Quality Control Plan for the Sacramento River and San Joaquin River Basin (Basis Plan), prepared by the CVRWQCB in compliance with the Federal CWA and the State Porter-Cologne Water Quality Control Act. The CVRWQCB has also adopted a general National Pollutant Discharge Elimination System (NPDES) permit for short-term discharges of small volumes of wastewater from certain construction-related activities as specified in the Waste Discharge Requirements General Order for Dewatering and Other Low-Threat Discharges to Surface Waters (Order No. 5-00-175, NPDES No. CAG995001). Discharges may be covered by the permit provided they are either four months or less in duration, or the average dry weather discharge does not exceed 0.25 million gallons per day. The general permit specifies standards for testing, monitoring, reporting, discharge prohibitions, and receiving water limitations.

During construction of the pipeline, several waterbodies would be crossed using the open-cut method. Waterbodies with low flows would be crossed using a dry-crossing method (coffer dams with temporary water diversion).

These crossings would be performed in a dry open-cut method so that in-stream work is performed in a relatively dry streambed, and BMP's and the Erosion Control and Sediment Transport Plan would be implemented in order to minimize downstream sedimentation. In addition, the CDFG would be consulted for a Section 1602 Streambed Alteration Agreement, and a Section 404 permit for the ACOE would be obtained, as necessary. This would also require federal CWA 401 certification for the RWQCB. The project would also adhere to additional requirements that may be stipulated in the Streambed Alteration Agreement and/or Section 404 permit.

Larger waterbody crossings would be performed using the HDD method, including Knights Landing Ridge Cut, Yolo Bypass/Tule Canal, Sacramento River, Natomas East

Main Drainage Canal (Steelhead Creek), and the second Curry Creek crossing. The possibility exists that a frac-out could occur, which would cause impacts to these waterbodies. PG&E would develop an HDD Fluid Release Contingency Plan that addresses containment and cleanup of a potential frac-out.

3.1.9 Land Use and Planning

A Land Use and Planning impact is considered significant if it;

- Conflicts with adopted land use plans, policies or ordinances;
- Results in conflicts with planning efforts to protect the recreational resources of an area;
- Results in incompatible adjacent land uses as defined by planning documentation;
- Results in residual impacts on sensitive water recreation areas, including shoreline lands and river banks that are host only to non-water recreation activities;
- Physically divides an established community;
- Conflicts with any applicable land use plan, policy, or regulation of an agency with jurisdiction over the project (including, but not limited to, the general plan, specific plan, or zoning ordinance) adopted for the purpose of avoiding or mitigating an environmental effect; or
- Conflicts with any applicable habitat conservation plan or natural community conservation plan.

The River Ranch Conservation Bank, managed by Wildlands Inc., is a 76-acre mitigation bank west of the Sacramento River located on both sides of County Road (CR) 16 in Yolo County. It provides permanent habitat for the endangered Valley elderberry longhorn beetle. The bank is within a 3,682-acre property owned by the Sacramento River Ranch LLC. The bank sells conservation credits for the loss of Valley elderberry longhorn beetle habitat within the primary service area, which includes all of Sutter, most of Sacramento, and smaller portions of Yolo and Placer counties. Wildlands plans to open two additional portions of the River Ranch Valley elderberry longhorn beetle conservation bank, encompassing an additional 95 acres. A portion of Line 407 West extends through the River Ranch Conservation Bank, and mitigation would be required.

Segments of Line 407 West and Line 407 East in Sutter County traverse lands covered by the Natomas Basin Habitat Conservation Plan (NBHCP), and the Powerline Road Distribution Feeder Main (DFM) in Sacramento County is also on land covered by the NBHCP. Four conservation tracts (Huffman East, Huffman West, Vestal, and Atkinson) exist along Riego Road in the Line 407 West project area, two on the north side and two

on the south side of the road. In addition, most of the Natomas Basin is currently used for agriculture, and rice fields dominate the project area within the NBHCP.

The purpose of the NBHCP is to promote biological conservation in conjunction with economic and urban development within the permit areas. The NBHCP establishes a multi-species conservation program to minimize and mitigate expected take of covered species that could result from development, including giant garter snake and Swainson's hawk. The NBHCP requires mitigation for designated types of development within the NBHCP area boundaries, including public and private utilities. Compliance includes the requirements for land and/or fee dedication as well as the application of measures to avoid, minimize, and mitigate the take of species covered by the NBHCP.

3.1.10 Noise

A Noise impact is considered significant if:

- Noise levels from Project operations exceed criteria defined in a noise ordinance or general plan of the local jurisdiction in which the activity occurs;

- Noise or groundborne vibrations from Project operations have direct or indirect effects on sensitive receptors (such as residential neighborhoods);

- Expose persons to or generate noise levels in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies;

- Expose persons to or generate excessive groundborne vibration or groundborne noise levels;

- Cause a substantial permanent increase in ambient noise levels in the project vicinity above levels existing without the project;

- Cause a substantial temporary or periodic increase in ambient noise levels in the project vicinity above levels existing without the project; or

- For a project located within an airport land use plan or, where such a plan has not been adopted, within 2 miles of a public airport or public use airport, expose people residing or working in the project area to excessive noise levels. For a project within the vicinity of a private airstrip, expose people residing or working in the project area to excessive noise levels.

Movement of natural gas through the pipeline would not contribute noise in excess of the operation of the current pipeline. Consequently, there would be no additional noise impact from operation of the Project. Construction of the Project would temporarily generate levels of noise that could substantially increase ambient noise levels in the vicinity of the pipeline route. These noise levels could exceed Municipal Code noise standards. An additional potentially significant impact is that of groundborne vibration

and its potential to affect nearby receptors, specifically the potential to disrupt the sleep of nearby residents as a result of possible nighttime construction.

3.1.11 Recreation

- Prevent or impede access to an established recreation area during its peak use periods or for more than 1 year;
- Adversely affect areas of special recreational concern (such as a wilderness area or wilderness study area);
- Provide or enable access to previously inaccessible, environmentally sensitive areas;
- Result in permanent alteration of a recreation resource (e.g., use of recreation lands or waters, disturbance to unique vegetation, habitat or outstanding landscape characteristics);
- Result in increased use of existing neighborhood and regional parks, resulting in physical deterioration; or
- Result in substantial adverse physical effects from construction of new or altered recreational facilities.

The project would be constructed to support existing and planned development and would not impact population in the area or create the need for new or expanded parks or other recreation facilities. The project would be constructed within 0.5 mile of Cache Creek, the Sacramento River, Rio Ramaza Marina, and existing Class II bikeways in the city of Roseville. The Sacramento River would be crossed using horizontal directional drilling techniques, so boating, rafting, and use of the Rio Ramaza Marina would not be interrupted. There would be no need to close city of Roseville bikeways within the vicinity of the project area because the project would not extend onto Baseline or Fiddyment roads. Impacts associated with construction noise may be experienced by the public during project construction; however, these impacts would be temporary.

3.1.12 Socioeconomics (Population and Housing; Public Services; Utilities and Service Systems)

An adverse socioeconomic impact is considered significant and would require mitigation if Project construction or operation would:

- Cause the vacancy rate for temporary housing to fall to less than 5 percent;
- Increase the short- or long-term demand for public services, utilities, or service systems in excess of existing and projected capacities;
- Cause a permanent population increase of 3 percent or more in a county affected by the Project; or
- Displace a large number of people.

Population and Housing
During construction, temporary impacts to existing residences would occur on private driveways, and construction activities would be coordinated with home owners. Thus, no direct impacts on accessing residences are expected during construction or operation. Pipeline construction would occur primarily across agricultural lands and rural residences, but would not remove or displace residences, people, or businesses. Therefore, no direct impacts related to displacement of existing housing or people, necessitating the construction of replacement housing elsewhere, would result from the proposed Project. During Project construction, Project-area population impacts related to workforce would be short-term. The Project would not result in the direct construction of additional housing units.

Public Services
The project would be constructed to support existing and planned development and would not increase demands on, or require the construction of, additional fire or police facilities, school facilities, park spaces, or any other public service. In terms of pipeline risks and safety, PG&E's *Gas System Maintenance & Technical Support, Emergency Plan Manual* would apply to pipeline construction and maintenance activities and includes established guidelines and procedures to be followed in the event of an emergency. The purpose of the plan is to provide procedures and other directives to be carried out in the event of fire, explosion, earthquake, accidental release of hazardous materials or waste, or any similar emergency. When such an emergency occurs, the plan would be implemented by PG&E's Facility Emergency Coordinator. The plan is annually reviewed with local agencies to ensure that plan design and implementation measures are current and that all personnel understand the plan and their responsibilities.

Utilities and Service Systems
The project would be constructed to support existing and planned development and would not result in the need for new or altered water supply, water facilities, wastewater treatment facilities, or expanded sewer trunk lines. The project would not result in new point sources and would not cause wastewater requirements established by the Regional Water Quality Control Board to be exceeded.

Portable restrooms would be used and maintained during construction and removed after completion of the project. PG&E would obtain hydrostatic test water from agricultural wells, and agricultural wells and canals would be sources of water for dust control during project construction.

PG&E would dispose of waste in accordance with published national, state, and local standards relating to solid waste. The project would not have a significant impact on landfills because the project would generate a small amount of construction waste, which can be easily accommodated by landfills located near the project area. In addition, project waste would be recycled to the extent practicable.

Construction activities could inadvertently contact underground facilities, possibly leading to short-term service interruptions. This is not anticipated to occur and implementation of standard practices, such as contacting Underground Service Alert, would reduce the impact.

Operation and Maintenance would not result in or require new staff to support the project once the pipeline is in operation, so there would be no increase to population requiring additional or expanded utilities. Operation of the natural gas pipeline would not cause negative adverse affects on utilities and service systems in the project area.

3.1.13 Transportation and Circulation

A Transportation impact is considered significant if:

- Project related traffic or other activities must use an access road that is already at or below Level of Service (LOS) E, or is such that it would bring a roadway down to LOS E. (E level traffic flow = 75% - 100% of capacity);

- Project related traffic or other activities would result in a substantial safety hazard to motorists, bicyclists or pedestrians;

- Project related traffic or other activities would restrict one or more lanes of a primary or secondary arterial during peak-hour traffic, thereby reducing its capacity and creating congestion;

- Project implementation could or does result in insufficient parking;

- The installation of the transmission line within, adjacent to, or across a roadway would reduce the number of, or the available width of, one or more travel lanes during the peak traffic periods, resulting in a substantial disruption to traffic flow and/or a substantial increase in traffic congestion;

- Construction activities would restrict access to or from adjacent land uses and there would be no suitable alternative access;

- A major roadway (arterial or collector classification) would be closed to through traffic as a result of construction activities and there would be no suitable alternative route available. An increase in vehicle trips associated with construction workers or equipment would result in a substantial disruption to traffic flow and/or a substantial increase in traffic congestion on the roadways in the project vicinity;

- Construction activities or the operation of the project would interfere with or extend into navigable airspace and could potentially have an impact on aviation activities within the restricted area of a designated airport or helipad;

- Construction activities or the operation of the project would result in safety problems for vehicular traffic, pedestrians, transit operations, or trains;

- Construction activities of the project would restrict the movement of emergency vehicles, and there would be no reasonable alternative access routes available;

- Construction activities or staging activities would increase the demand for and/or reduce the supply of parking spaces, and there would be no provisions for accommodating the resulting parking deficiencies;

- Construction activities would disrupt bus or rail service and there would be no suitable alternative routes or stops;

- Construction activities within, adjacent to, or across from a railroad right-of-way would result in temporary disruption of rail traffic; or

- Construction activities would impede pedestrian movements or bike trails in the construction area and there would be no suitable alternative pedestrian/bicycle access routes.

Project-related traffic would involve the transportation of workers, equipment and construction materials to the construction site.

The Project includes installation of an underground natural gas transmission line with several crossings of local roads and directional drilling under freeways I-505 and I-5. Directional drilling would have no impact on traffic. The installation of the Line 406 underground pipeline would include trenching across the following roads: CR 85, CR 87, CR 88A and CR 96. The Line 407 underground pipeline would include trenching across CR 17, CR 98, CR 100, CR 101, CR 102, CR 117, Brewer Road, Fair Oaks Boulevard, Locust Road, Pleasant Grove Road, Powerline Road and Riego Road/Baseline Road. Underground construction along these roadways would cause temporary disruptions to project area roadways including lane closures, increased traffic volumes, access restrictions and have a negative affect on traffic safety. The Line 407 would also impact a minimal number of parking spaces and may result in temporary sidewalk closures.

PG&E plans to provide traffic control at all construction sites across roadways and limit work zones to a width that, at a minimum maintains alternate one-way traffic flow past the construction zone. PG&E would contact Placer County Unified School District at least one month prior to construction to coordinate construction activities adjacent to school bus stops. PG&E would obtain the required permits for temporary lane closures from Yolo County, Sutter County, Sacramento County, Placer County, and Caltrans. Before obtaining the permits PG&E would submit a Transportation Management Plan (TMP), subject to local jurisdictional review and approval. PG&E also plans to provide for residential areas a notification process for temporary parking impacts, appropriate sign postings, and specify the process for communicating with affected residents. In addition, PG&E would provide temporary pedestrian access, through detours or safe areas along the construction zone in areas with temporary closures of sidewalks and other pedestrian facilities.

3.2 Special Impact Areas

3.2.1 Cumulative Impacts

The CEQA requires an examination of the potential for a Project to have cumulative impacts when considered in conjunction with other Projects proposed and/or approved within a region. The Cumulative Projects Study Area for this Project is presently defined as proposed and approved projects in Yolo County, Sacramento County, Sutter County, Placer County and the city of Roseville. The EIR will contain a discussion of cumulative impacts of the proposed project.

3.2.2 Growth-Inducing Impacts

The CEQA requires a discussion of the ways in which a proposed Project could be an inducement to growth. The State CEQA Guidelines (section 15126.2(d)) identify a project to be growth-inducing if it fosters or removes obstacles to economic or population growth, provides new employment, extends access or services, taxes existing services, or causes development elsewhere. The EIR will contain a discussion of potential growth-inducing impacts of the proposed Project.

3.2.3 Environmental Justice

An environmental justice impact will be considered significant if implementation of the proposed Project or alternatives would:

- Have a potential to disproportionately impact minority and/or low-income populations at levels exceeding the corresponding medians for the County in which the project is located; or
- Result in a substantial disproportionate decrease in the employment and economic base of minority and/or low-income populations residing in the County and/or immediately surrounding cities.

The CSLC developed and adopted an Environmental Justice Policy to ensure equity and fairness in its own processes and procedures. This policy stresses equitable treatment of all members of the public and commits to consider environmental justice in its processes, decision-making, and regulatory affairs which is implemented, in part, through identification of, and communication with, relevant populations that could be adversely and disproportionately impacted by CSLC projects or programs, and by ensuring that a range of reasonable alternatives is identified that would minimize or eliminate environmental impacts affecting such populations.

The EIR will analyze the distributional patterns of high-minority and low-income populations on a regional basis. The analysis will focus on whether the proposed Project's impacts would have the potential to affect an area(s) with high-minority population(s) and on low-income communities disproportionately, thereby creating an environmental justice impact.